

CLAIMS:

What is claimed is:

1. A pressure sensitive adhesive for tissue repair comprising a thermoplastic lactide-containing terpolymer of monomer units derived from lactic acid, glycolic acid, and either caprolactone or valerolactone, said terpolymer having an average molecular weight of 1,000 to 3,000, exhibiting an adhesive strength of about 600 to about 150,000 Pa, and having a water solubility of 0.01 to about 500 mg/ml at about 25°C.
2. The pressure sensitive adhesive of claim 1 wherein terpolymer is poly(lactide/glycolide/caprolactone).
3. The pressure sensitive adhesive of claim 1 wherein the terpolymer is poly(lactide/glycolide/valerolactone).
4. The pressure sensitive adhesive of claim 3 wherein the terpolymer comprises about 35-45% lactide, about 35-45% glycolide, and about 10 to about 30% valerolactone.
5. The pressure sensitive adhesive of claim 1 wherein the terpolymer has a glass transition temperature of less than 0°C.
6. The pressure sensitive adhesive of claim 1 further comprising a filler.
7. The pressure sensitive adhesive of claim 6 wherein the filler is selected from the group consisting of bone chips, tricalcium phosphate, hydroxylapatite, small intestine submucosa, bioglass granules, synthetic polymers, calcium carbonate, calcium sulfate and collagen.
8. The pressure sensitive adhesive of claim 1 further comprising a bioactive agent.
9. The pressure sensitive adhesive of claim 8 wherein the bioactive agent is a growth factor.
10. The pressure sensitive adhesive of claim 9 wherein the growth factor is selected from the group consisting of a fibroblast growth factor, a

transforming growth factor, a bone morphogenetic protein, an epidermal growth factor, a platelet-derived growth factor, and an insulin-like growth factor.

11. A pressure sensitive adhesive for tissue repair comprising a thermoplastic lactide-containing terpolymer of monomer units derived from lactic acid, glycolic acid, and either caprolactone or valerolactone, said terpolymer having an average molecular weight of 1,000 to 2,500, exhibiting an adhesive strength of about 600 to about 150,000 Pa and having a water solubility of 0.01 to about 500 mg/ml at about 25°C.

12. A pressure sensitive adhesive for tissue repair comprising a thermoplastic lactide-containing terpolymer of monomer units derived from lactic acid, glycolic acid, and either caprolactone or valerolactone, said terpolymer being provided as a moldable putty, having an average molecular weight of 1,000 to 3,000, exhibiting an adhesive strength of about 600 to about 150,000 Pa and having a water solubility of 0.01 to about 500 mg/ml at about 25°C.

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